

# ABSTRACT OF THE DISCLOSURE

A plasma torch comprises: a hollow shaft connected to a first supply pipe for a flow of a first gas and to an electrode which is hollow so that it surrounds part of the shaft and forms a first chamber for cooling the electrode and for outfeed of the first gas; a nozzle  
5 surrounding the electrode and forming a second chamber, for receiving the first gas for generating plasma, and a third chamber, for the passage of the first gas arriving from the first, cooling chamber through third  
10 pipes, to the second chamber, through second pipes which pass through the nozzle. First sealing parts are inserted between the shaft and the nozzle on both sides of the third pipes, forming a sealed zone close to the third pipes. A cylinder for driving the shaft acts upon  
15 the shaft by means of the inflow and, respectively, the outflow of a second operating fluid in a fourth chamber of the cylinder, to provide a forward starting position, in which the electrode is in contact with the nozzle, and a back operating position, in which the  
20 electrode is distanced from the nozzle, in the presence of the first gas. [Figure 1]